APPLICATION OF

VIRGINIA ELECTRIC AND POWER COMPANY D/B/A DOMINION VIRGINIA POWER

CASE NO. PUE-2005-00018

For a certificate of public convenience and necessity for facilities in Loudoun County: Pleasant View-Hamilton 230 kV Transmission Line and 230 kV- 34.5 kV Hamilton Substation

SUPPLEMENTAL REPORT OF HOWARD P. ANDERSON JR., HEARING EXAMINER

November 28, 2007

By Order dated February 21, 2007 ("Remand Order"), the Commission found that additional transmission facilities are needed to serve the Purcellville Load Area, but remanded this case for further proceedings to address the following matters:

- 1. construction time required for routes E7, D3, and Modified D;
- 2. right-of-way acquisition costs for routes E7, D3, and Modified D;
- 3. detailed engineering data for the portion of the Modified D route comprising segments within or adjacent to the Washington & Old Dominion Trail ("Trail") including pole placements and existing and/or new right-of-way;
- 4. any benefits of individual segments of the E7 and D3 routes in relation to reasonably expected future transmission requirements;
- 5. for purposes of underground construction, utilization of cross-linked polyethylene ("XLPE") power lines as opposed to high pressure fluid-filled ("HPFF") power lines;
- 6. underground construction of the portion of the E7 and D3 routes comprising segments along or adjacent to 49, 25, 23, and 22 including right-of-way, cost, reliability, and impact on scenic assets, historic districts, and environment; and
- 7. underground construction of the portion of the Modified D route comprising segments along or adjacent to the Trail including right-of-way, cost, reliability, and impact on scenic assets, historic districts, and environment.¹

ne Commission further established	a procedural	l schedule and	d set a	hearing o	date of Jul	y 9	, 2007
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¹Remand Order at 8, 9.

At a pre-hearing conference held on February 28, 2007, I directed the participants to address certain related matters. I requested counsel for Loudoun County to advise the Commission regarding landowners who would be willing to proffer donations of their land for underground construction and to what extent, if any, the County would be willing to contribute to the incremental cost of constructing the line underground. I requested counsel for Virginia Electric and Power Company d/b/a Dominion Virginia Power (the "Company" or "DVP") to clarify how much land is between the Company's thirty-foot distribution line easement and the Trail and who owns that land. Regarding underground construction, I further requested counsel for the Company to include information for underground construction continuing into the Hamilton Substation. Finally, I requested additional information regarding the right-of-way width for underground construction and its impact on trees.²

On July 9, 2007, the hearing was convened as scheduled. James C. Dimitri, Esquire; Stephen H. Watts, Esquire; and Lisa S. Booth, Esquire, appeared as counsel for the Applicant; Barbara P. Beach, Esquire, appeared as counsel for the Town of Leesburg ("Leesburg"); Michael A. Montgomery, Jr., Esquire, appeared as counsel for Orme Farm, L.L.C. and Cammack Brothers Partnership, L.P.; Cliona Mary Robb, Esquire, appeared as counsel for Northern Virginia Regional Park Authority ("Park Authority"); Matthew D. Pethybridge, Esquire, appeared as counsel for Kincaid Forest Homeowners Association ("Kincaid Forest"); Charles W. Hundley, Esquire, appeared as counsel for Nancy A. Davenport, individually and the Estate of Dewayne Brock Davenport; Kelly Thompson Cochran, Esquire, appeared as counsel for Oatlands National Trust for Historic Preservation; Robert E. McKew, Esquire, appeared as counsel for Scenic Loudoun Legal Defense, Inc. ("SLLD"); John H. Montgomery, Esquire, appeared as counsel for the County of Loudoun ("Loudoun County"); Randolph Sutliff, Esquire, appeared as counsel for Dry Mill Residents and Estates at Shenstone Homeowners Association ("Shenstone"); and Wayne N. Smith, Esquire, and Arlen K. Bolstad, Esquire, appeared as counsel for the Commission. Post-hearing briefs were filed on September 27, 2007. A transcript of the proceedings is filed concurrently with this report.

Summary of the Hearing Record

Company Direct

The Company sponsored the direct testimonies of James A. Cox, John B. Bailey, Richard L. LaVigne, and Donald Koonce. Mr. Cox provided engineering and cost information in response to items 1, 2, and 3 of the Commission's points of inquiry listed in its Remand Order. Mr. Cox testified that construction time for the overhead installation of the E7, D3, and Modified D routes would be between 18 and 24 months. Mr. Cox explained that the 24-month duration would be required for the D3 or E7 routes utilizing underground construction from and including segment 49 to the Hamilton Substation. Construction of the remaining route options would be closer to 18 months. Mr. Cox stated the overhead and underground construction for all hybrid options could be performed within the same time period by separate contractors.³

²February 28, 2007, Tr. at 11-15.

³Ex. No. 168, at 1.

Mr. Cox explained that the Company conducted an aerial survey to determine more precisely how the line could be engineered for the portion of the Modified D route through the Shenstone Subdivision. The aerial survey was performed by helicopter using LIDAR (light detection and ranging) technology combined with a high resolution camera. Attachment JAC-1 identifies tentative pole placements and pole heights along this portion of the Modified D route.⁴

Mr. Cox explained that generally the portion of the Modified D route along segment Trail B'5 would require approximately 60 feet of additional right-of-way adjacent to the Trail property (10 feet between the Trail property and the centerline of the route, plus 50 feet to the east). However, for approximately 5,300 feet of the 7,400-foot length segment Trail B, there is a double circuit distribution pole line with a 30-foot right-of-way that meanders along, outside of, and generally parallel to the Trail property. Mr. Cox testified that this distribution line could be relocated to the transmission line poles and the additional 30-foot right-of-way would be incorporated into the transmission line right-of-way. Moreover, if the distribution circuits were attached to the transmission structures they would face away from the Trail, thus helping to maintain the tree canopy along the Trail.⁶

Mr. Cox testified that two homes in the Shenstone Subdivision are located less than 60 feet from the edge of the right-of-way along segment Trail B. The Company designed three options⁷ for mitigating the impact of the line on these homes and increasing the distance between them and the line.

Next Mr. Cox provided updated right-of-way acquisition costs for the E7, D3, and Modified D routes based on 2007 Loudoun County property assessments. Including danger tree rights⁸ where applicable, the estimates are as follows:⁹

E7 - \$6,100,953 D3 - \$11,456,070 Modified D - \$14,435,655

Mr. Cox provided costs for routes E7 and D3 with underground construction along segments 49, 25, 23, and 22 using XLPE and HPFF cable. Based again on the 2007 property assessments, these cost estimates are as follows:¹⁰

E7 Hybrid #1 - \$74,904,710 (XLPE), \$82,450,510 (HPFF) D3 Hybrid #1 - \$76,200,451 (XLPE), \$83,746,251 (HPFF)

⁴Id. at 2.

⁵Segment B of the Trail refers to that segment of the Trail between Clark's Gap and the Trail's intersection with Route 7 west of Leesburg. Segment B' (prime) refers to the segment of the Modified D route along Segment B of the Trail. ⁶Id. at 3.

⁷Id. at 4, Attachment JAC 2, JAC 3, and JAC 4.

⁸Danger trees are trees located beyond the right-of-way that pose a danger to the line.

⁹Ex. No. 168, at 5.

¹⁰<u>Id.</u> at 5-6.

Mr. Cox also provided costs for the Modified D route with underground construction along segments B.1 and Trail B' using XLPE cable and HPFF cable. Using the same methodology, the Modified D Hybrid would cost as follows:

XLPE - \$63,396,905 HPFF - \$68,736,905¹¹

John Bailey, coordinator – siting and permitting – for DVP, filed direct testimony in response to the environmental issues raised in items 6 and 7 of the Commission's points of inquiry in its Remand Order. For his analysis of placing segments 49, 25, 23, and 22 of the E7 and D3 routes underground, Mr. Bailey used a right-of-way width of 60 feet. For overhead construction of these segments, Mr. Bailey used a 100-foot right-of-way width to accommodate a future double circuit. The underground scenario for the Modified D route is 30 feet of new right-of-way with a 10-foot offset from the property line of the Trail. The ten-foot offset would provide some distance between the underground trench and the root system of the trees located on the Trail. ¹²

Mr. Bailey also assumed that each of the terminal stations for the underground/overhead transitions would have a fenced area of 80 feet by 180 feet with additional space for landscaping. The Company also incorporated the "Option 2" modification across the Virts property in its evaluation of the underground D3 and E7 routes. For the D3 and E7 routes, the terminal stations would be located at the intersection of segments 49a and 49, and on the south side of Colonial Highway (Old Route 7) at the intersection of segment 22 and Option 2. One terminal station along Trail B' would be located immediately across Dry Mill Road from the northern terminus of segment B.1 in open pasture and the other, southern terminal station would be located on segment B.5 in a pasture adjacent to the Trail. Both of the terminal stations for segment Trail B' would be adjacent to Dry Mill Road, a scenic byway.

As noted above, I also directed the Company to consider and provide information pertaining to placing the proposed line underground from the above-mentioned terminal stations all the way to the Hamilton Substation. Mr. Bailey explained that this proposal would require the Company to bore under Route 7 and remain on the north side of the highway into the Hamilton Substation. ¹⁵

Mr. Bailey explained that the total length of segments 22, 23, 25, and 49 for either the overhead or the underground configurations is approximately 3.4 miles. ¹⁶ Based on the fact that the width for overhead and underground right-of-way differs, Mr. Bailey stated that the overhead approach would require the acquisition of 41 acres of land, and the underground option would require 25 acres of new right-of-way. If the underground section were extended all the way to the Hamilton Substation, the underground easement would require 44 acres while the overhead easement would require 73 acres.

¹¹Ex. No. 168, at 6.

¹²Ex. No. 169, at 1, 2.

¹³<u>Id.</u> at 3.

¹⁴Id.

¹⁵Id. at 3.

¹⁶<u>Id.</u> at 4.

Mr. Bailey then compared the parameters of placing the line underground or overhead along segment Trail B', which is approximately 1.8 miles in length. The overhead construction along Trail B' would require 21 acres and underground approximately 6 acres. These estimates do not include additional land needed for transition stations.¹⁷ Further impacts of the underground approach along segment Trail B' would include boring or cutting through the Trail at the southern end of the segment, trenching within the Trail for segment B.1, and then boring or cutting Dry Mill Road to reach the north terminal station.¹⁸

The direct testimony of Richard L. LaVigne addressed item # 4 of the Remand Order regarding benefits of individual segments of the E7 and D3 routes in relation to reasonably expected future transmission requirements. Mr. LaVigne stated it is reasonable to expect that a future 230 kV line from the proposed Hamilton Substation to the existing Middleburg Substation will be needed. This future line is anticipated to be needed for the 2020 time frame. Mr. LaVigne explained that the benefits of building a double circuit design pole as far south as possible would be to help maintain an option that could minimize the amount of new right-of-way and impact when a future Hamilton – Middleburg line is needed.¹⁹

DVP witness Donald Koonce presented direct testimony addressing the issues of the reliability of underground transmission lines and, specifically, the use of XLPE cables for the Pleasant View – Hamilton transmission line. Mr. Koonce reiterated that DVP strives to provide reliable service in the most economical manner possible. In that regard, Mr. Koonce stated that, in the very limited number of cases where there were no viable overhead line routes available, the Company has installed underground transmission lines. Mr. Koonce also explained that radial underground transmission lines have been installed when the customers being served requested underground facilities and paid the increased costs of the underground facilities. In all cases, Mr. Koonce testified that radial line installations have been built with 100% redundancy.²⁰

Mr. Koonce stated that the Company's transmission system consists of approximately 6,100 miles of lines operating at 69 kV and above. Of this total, there are 18.3 miles of 69 kV underground lines, 0.075 miles of 115 kV underground lines, and 32.36 miles of 230 kV underground lines. Underground lines represent 0.83 percent of the Company's total transmission network. Mr. Koonce stated all of the Company's existing 230 kV underground facilities are HPFF cable systems. Mr. Koonce added that in 1978, the Company installed approximately 400 feet of XLPE 115 kV cable inside the 12th Street Substation in downtown Richmond. In 1991, Mr. Koonce stated the Company installed five short (350 to 900 feet) 69 kV underground circuits utilizing ethylene-propylene rubber ("EPR") insulated cables. Mr. Koonce testified there have been termination failures on both the 115 kV XLPE and 69 kV EPR cables, resulting in the Company's abandonment of the XLPE cable and replacement of the EPR cable.²¹

17Id

 $^{18\}overline{\text{Id.}}$ at 7.

¹⁹Ex. No. 170, at 1-3.

²⁰Ex. No. 171, at 2.

²¹<u>Id.</u> at 3.

Mr. Koonce asserted that no portion of the Pleasant View-Hamilton 230 kV transmission line should be installed underground for the following reasons. First, Mr. Koonce stated an underground line would have a detrimental effect on the reliability of service in Loudoun County and would create operating problems under normal and contingency outage situations. Second, Mr. Koonce testified the significantly higher costs of underground transmission facilities are not warranted in this situation. Finally, Mr. Koonce stated he would not recommend an underground radial line without the redundancy of a second transmission circuit.

Mr. Koonce reiterated that the most significant difference between the reliability of overhead and underground transmission lines is the amount of time needed to repair an outage. Although outages of transmission lines in general are not common, Mr. Koonce pointed out that when an outage occurs, it is critical to repair the line and put it back in service as quickly as possible because of the significant number of customers that can be affected.²²

Mr. Koonce testified that, with a hybrid line (combination of overhead and underground portions), the circuit is susceptible to temporary fault conditions on the overhead portions of the line. Equipment is installed at the terminal stations to identify whether a fault is in the overhead sections or the underground section. However, Mr. Koonce pointed out that this additional equipment adds to the complexity and reliability of the protection protocols. Mr. Koonce agreed with Loudoun County witness Gary Sheerin who characterized hybrid transmission lines as "the worst of both worlds."²³

Mr. Koonce described the equipment that would be needed to transition from the overhead line construction to underground cables. There would be a graveled, fenced area approximately 80 feet by 180 feet that would contain the following pieces of equipment:

- Overhead line backbone structure (75-foot steel H-frame);
- Multiple pipe stands for underground cable terminations, current transformers and surge arresters;
- Control house for protective relays, communications equipment, batteries and battery charger;
- A prefabricated enclosure approximately 12 feet high by 12 feet wide by 35 feet long would also be required for pressurization equipment for HPFF cable systems; and
- Each underground cable would be terminated in a large porcelain bushingtype insulator that is approximately two feet in diameter and ten feet tall.

Mr. Koonce concluded that, to the average person, this transition station would resemble a conventional electric substation.²⁴

 23 Id. at 6.

²²Id. at 5.

 $^{^{24}\}overline{\text{Id.}}$ at 8.

Mr. Koonce gave the following cost estimates which do not include any costs for acquisition of right-of-way and clearing:

- For the designated E7 and D3 route segments (3.4 miles) the estimated cost of 230 kV XLPE cable installation, including the two terminal stations required to transition from overhead to underground and back, is \$42.2 million;
- The comparable cost of a 230 kV HPFF installation is \$49.8 million;
- For the Trail B' segment of the Modified D route (1.8 miles), the estimated cost of the 230 kV XLPE installation, including the two terminal stations is \$25.1 million; and
- The comparable cost of a 230 HPFF cable installation is \$30.4 million.

As noted above, I asked the Company to also estimate the cost of taking the proposed line underground from the eastern end of segment 49 to the proposed Hamilton Substation in an effort to eliminate one of the terminal stations. Mr. Koonce provided the following in response:

- The estimated cost of a 230 kV XLPE cable installation, including the terminal station at the eastern end of segment 49 and shunt reactors at the Hamilton Substation, would be \$71.1 million; and
- The comparable cost of a 230 kV HPFF cable installation would be \$86.8 million. 25

Staff

Staff witness Martin proposed several changes to the location of the Company's poles in the Shenstone area of the Trail as shown on JAC-1 through JAC-4 of Mr. Cox's direct testimony, exhibit number 168. In making his suggestions, Mr. Martin noted that the span lengths in this area range in length from 206.94 feet to 507.03 feet. The spans are short because they zigzag on and off the Trail to avoid close proximity to houses or to avoid being on the Trail property. Accordingly, Staff proposes to eliminate some of the poles as shown on JAC-1 to reduce the visual impact of the overhead line. Using exhibits JAC-1 through 4 as a reference, Mr. Martin's suggestions are as follows:

1. Eliminate pole #3 with a resulting span length of 650.46 feet between poles #2 and #4. This would remove pole #3 from the front of a residence. (JAC-1, sheet 2).

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²⁵<u>Id.</u> at 10.

- 2. Move pole #4 a short distance to the north to place it further from the driveway of the house located on property PIN 308-28-0886-000. This would also place the pole further from the paved trail and the horse trail. (JAC-1, sheet 2).
- 3. Move pole #5 slightly to the northeast which would have the effect of moving the pole further from the Trail and more in line so that a tangent tower of lighter construction could be used. (JAC-1, sheet 2).
- 4. Eliminate pole #7, with a resulting span length from pole #6 to pole #8 of 601.98 feet. (JAC-1, sheet 3).
- 5. Move pole #8 to the north and up a rise in the land. This change would move the pole further from the Trail and to a higher elevation, thus retaining more trees. This change would shorten the span length created by the elimination of pole #7 and provide additional screening to the fairground's driveway. (JAC-1, sheet 3).
- 6. Eliminate pole #13 with a resulting span length from pole #12 to pole #14 of 914.57 feet. While Staff noted that this would create a lengthy span, it crosses a small ravine and the 145-foot poles make this feasible. (JAC-1, sheets 5 and 6).
- 7. Shift pole #17 northward away from the back of the house on Shenstone lot #108, so as to be less intrusive in the backyard of this property. (JAC 1, sheet 7).
- 8. Move pole #18 south toward the dirt path pedestrian access to distance it from Shenstone lot # 109. Staff notes that, if pole #18 is moved far enough, it may be able to eliminate pole #19, which is currently located almost directly behind Shenstone lot #110. Staff maintains that it might be necessary to shift pole #20 northward to the top of a rise to gain elevation, which would also increase its distance from Shenstone lot #111. (JAC-1, sheet 8).
- 9. The spans between poles #17, #18, #19, and #20 are 375.85, 343.25, and 329.28 feet, respectively, for a total of 1048.38 feet between poles #17 and #20. Staff suggests dividing this span length into two spans, each 524.19 feet long. Staff notes that there is some curvature in the Trail in this area, so that reducing the number of spans might bring the spans slightly further into some Shenstone backyards. However, Staff maintains this might be an acceptable trade-off to both reduce the number of poles and locate poles farther from houses. (JAC-1, sheets 7 and 8).
- 10. Staff states it appears that pole #23 could be placed closer to the position of pole #24, with the elimination of pole #24. According to Staff, this

would increase the distance of pole #23 from the house on Shenstone lot #14 and reduce the total pole impact on the house on Shenstone lot #18. However, it would require a more acute angle in crossing the Trail at segment B.5. (JAC-1, sheet 10).²⁶

Staff prepared a cost comparison table for the various route alternatives which is set forth below.

STAFF'S COST COMPARISON TABLE PLEASANT VIEW-HAMILTON 230 kV TRANSMISSION LINE INCORPORATING RIGHT-OF-WAY COST CORRECTIONS and EXTRA TALL TOWER COST CORRECTION JULY 30, 2007

Revised costs in **bold**

Route	Total Cost (\$)	Cost information source
E7 overhead	36,659,618	JAC-2 Revised 7-24-07
E7 underground XLPE ¹	75,775,560	Gerry Sheerin testimony p. 7
E7 hybrid #1 XLPE ²	73,761,617	JAC-2 Revised 7-24-07
E7 hybrid #2 XLPE ³	96,234,786	JAC-2 Revised 7-24-07
E7 hybrid #1 HPFF	81,307,417	JAC-2 Revised 7-24-07
E7 hybrid #2 HPFF	111,964,786	JAC-2 Revised 7-24-07
D3 overhead	36,620,698	JAC-2 Revised 7-24-07
D3 hybrid #1 XLPE	74,220,714	JAC-2 Revised 7-24-07
D3 hybrid #2 XLPE	96,831,089	JAC-2 Revised 7-24-07
D3 hybrid #1 HPFF	81,766,514	JAC-2 Revised 7-24-07
D3 hybrid #2 HPFF	112,561,089	JAC-2 Revised 7-24-07
Mod D overhead	37,802,068	JAC-2 Revised 7-24-07
Mod D hybrid XLPE ⁴	59,343,834	JAC-2 Revised 7-24-07
Mod D hybrid HPFF	64,683,834	JAC-2 Revised 7-24-07
Trail underground XLPE ⁵	80,370,762	Donald Koonce rebuttal testimony p. 15
Trail underground HPFF ⁵	91,372,933	Donald Koonce rebuttal testimony p. 15

Notes:

¹This is the sum of Loudoun County witness Gerry Sheerin's line cost estimate of \$74,441,672 (two cables per phase, no spare cables) and the Company's minimum right-of-way cost estimate of \$1,333,888 provided in response to Staff Data Request Question No. 18 (Set No. 2).

In conclusion, Staff recommends the proposed line be built overhead on the Modified D route, with the additional recommendation that no line structures be placed on the Shenstone lots but instead on the Company's existing right-of-way on the Trail.

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²Hybrid #1 undergrounds sections 49, 25, 23, 22 (i.e., to Colonial Highway).

³Hybrid #2 undergrounds sections 49, 25, 23, 22, 6, 4, 1 (i.e., to Hamilton Substation).

⁴Hybrid Modified D undergrounds wherever parallel to the W&OD Trail.

⁵Zero right-of-way cost. Reactive compensation cost not included.

²⁶Ex. No. 188, at 2-4.

Park Authority

The Park Authority argues that the record developed on remand strongly supports the selection of the E7 route as the best route for the proposed transmission line. The Park Authority contends that, although the Company stresses that all overhead routes and all underground routes could be built within the time frame necessary to complete the line, the Modified D and D3 routes present unique complications that are not present with the E7 route. The Park Authority claims that uncertainty regarding the acquisition of right-of-way from VDOT and the unique constraints posed by construction within the Park make the Modified D route unattractive.²⁷

Park Authority witness Studabaker testified that right-of-way acquisition costs for the Modified D and D3 routes are double the acquisition costs for the E7 route.²⁸ In addition, the Park Authority claims that actual acquisition costs will include damage to the residue, and those costs were not reflected in DVP's estimates. The Park Authority argues that damage to the residue will be greater on the Modified D route than the E7 route because the E7 route is primarily large, open tracts of land while the Modified D route is characterized by smaller parcels with many residences. The Park Authority argues that, if Modified D is constructed, shifting a 145-foot pole as suggested by Staff would not reduce the visual impact; shifting the poles onto Park Authority property would only deprive impacted homeowners of any compensation for impacts from the line.

The Park Authority argues that although it is proper for the Commission to consider alternate routes, the evidence does not support the Modified D route as a route that reasonably minimizes adverse impact on the scenic and environmental assets of the area.³⁰ In particular, the Park Authority notes that final placement of the pole structures along Trail B' has not been determined and that the record does not support the assumption that taller poles would preserve the tree canopy in and along the Trail. The Park Authority maintains that the remand proceeding has provided the Commission with more variations on the Modified D route but has failed to provide any assessment showing that those variations will minimize impact on the Park and surrounding communities.³¹

Park Authority witness Simmons characterized the Company's assessment of routing, construction, and maintenance of the proposed transmission line as inadequate. For example, Mr. Simmons estimates the required cleared space around pole structures to be at least 4,000 - 5,000 square feet at a minimum rather than the Company's estimate of 2,500 square feet.³² The Park Authority asserts that the remand record does not credibly refute the concerns raised by the Park Authority concerning the overall construction impacts of the Modified D route on the Trail.³³

Further, the Park Authority disputes the Company's assessment of tree damage within the Park, and presented the testimony of Donald Zimar, a forestry expert who provided an inventory of tree species in the Park. Mr. Zimar disputes Company witness Hoover's testimony that, based on

²⁷Park Authority Brief at 2, 3.

²⁸<u>Id.</u> at 4.

³⁰Board of Supervisors of Campbell County, et al. v. Appalachian Power Company, 216 Va. 93, 102 (1975).

³¹Park Authority Brief at 7.

³²Tr. 6178.

³³Park Authority Brief at 11.

JAC-1, as few as 15 trees would be removed as a result of the Modified D route.³⁴ The Park Authority maintains that Mr. Hoover did not perform a rigorous tree inventory and therefore the information he provided is not credible. Mr. Zimar concluded that based on his research, the Company's detailed engineering will result in considerable removal of the tree canopy and that DVP's assessment to the contrary is not accurate.³⁵

Loudoun County

Loudoun County presented the testimony of Charles Yudd, assistant to the Loudoun County Administrator. Mr. Yudd presented a copy of the Loudoun County Board of Supervisors' resolution of June 5, 2007. Loudoun County has consistently and repeatedly supported undergrounding the proposed transmission line along a route outlined by County witness Peter Lanzalotta. Loudoun County stands by its resolution of June 5, 2007, which was made a part of the record of this proceeding, reaffirming its opposition to installation of anything other than an underground alternative. Additionally, the County resolved:

[T]hat the County only supports the location of the line along or adjacent to the W&OD Trail on the segment between the Town of Leesburg and Clark's Gap if the State Corporation Commission requires Dominion to install the line underground at a minimum width with the least amount of impact.³⁷

Loudoun County continues to advocate the protection of the Trail and states that the proposed transmission line should be placed near the Trail only as a last resort and then only if built underground. Finally, Loudoun County was unable to provide any evidence regarding the number of landowners who would donate right-of-way for underground construction and took no position on paying the additional costs of underground construction as compared to overhead construction. ³⁹

Shenstone

Respondent Shenstone continues to support the E7 route because it has the least impact to homes and avoids the Trail. Shenstone maintains that the Modified D route would be the most expensive to build and provides no double circuit capacity to accommodate an anticipated Middleburg to Hamilton transmission line. Shenstone further claims the Modified D route will cause significant residual damage to homes with septic fields adjacent to the Trail, especially with an underground configuration. Shenstone also argues the Company's cost estimates are overstated for the E7 route and understated for the Modified D route. In conclusion, Shenstone states that an underground line or a hybrid transmission line is not economically feasible for any alignment. 40

³⁵Ex. No. 176, at 2, 3.

³⁹Tr. 6209-6220.

³⁴Tr. 6416.

³⁶Ex. No. 184

³⁷Post Remand Filing of Loudoun County at 2.

 $^{^{38}}$ Id.

⁴⁰Shenstone Brief at 7-13.

SLLD & Nancy Davenport

Respondents Nancy Davenport and SLLD sponsored the testimony of James Ruffner, president of Ruffner Appraisal Services, Inc., a local real estate appraisal and consulting firm. Mr. Ruffner testified that the Company's acquisition cost estimates for the E7 route are deficient because they fail to consider at least ten planned subdivisions that are at various stages of approval and development. Mr. Ruffner contends that since the approval process for the subdivisions has moved forward, the actual value of the land is much greater than the assessed value used by the Company. Mr. Ruffner further claims that damage to properties adjacent to but not traversed by the transmission line right-of-way would be far greater for the E7 corridor than for the Modified D corridor. Mr. Ruffner stated that much of the Modified D corridor is already heavily impacted by the Leesburg Bypass, Route 7, and existing commercial developments, whereas the E7 corridor is primarily open, rural land that is unspoiled by urban features. Further, Mr. Ruffner stated the Company has overestimated the danger tree costs along the Modified D route. Mr. Ruffner concluded that if the transmission line were placed on existing right-of-way afforded by the Modified D route, the acquisition cost estimates for the Modified D routes would be greatly reduced.

The National Trust for Historic Preservation and Oatlands, Inc.

Elizabeth Merritt, deputy general counsel of the National Trust for Historic Preservation, testified that most archeological resources are usually not known or identified in advance of construction, but are easier to avoid with overhead construction. In contrast, however, Ms. Merritt stated the kinds of adverse visual effects on historic landscape features and viewsheds caused by overhead construction are much more difficult to avoid and mitigate, and pose a significantly higher risk of irreparable damage to the settings of particular historic properties or districts. 42

On brief, the National Trust for Historic Preservation and Oatlands, Inc. ("Oatlands") states that segments of the D3 route through the Goose Creek Expansion Area's relatively open terrain may also be less complicated for underground construction purposes. Oatlands believes that partial or total undergrounding of the D3 route would satisfy the requirement of § 56-46.1 of the Code of Virginia to reasonably minimize adverse impacts on the scenic assets, historic districts, and environment of the area considered.

Oatlands concludes that the E7 route is the worst of the route alternatives under consideration because it would maximize condemnation of new right-of-way, impact the viewsheds of significant historic properties, cut across the backbone of the Journey Through Hallowed Ground Corridor, and bisect the Goose Creek Expansion Area. Oatlands acknowledged that the house counts are higher along the D3 and Modified D corridors, but pointed out that most of these houses are already impacted by Route 7 and the Route 7 Bypass. Oatlands maintains that, short of undergrounding the line, there is no way to mitigate the impacts of the D3 route on the Goose Creek Expansion Area while there is substantial evidence concerning the ability of the Company to mitigate an overhead Modified D route along the Trail.⁴³

⁴²Ex. No. 187, at 2, 3.

⁴¹Ex. No. 185, pages 2-6.

⁴³Oatlands Brief at 14 -16.

Kincaid Forest

Although Kincaid Forest admits it is not affected directly by any of the routes under consideration, Kincaid Forest addressed the impacts of uncompensated property damage relating to the Modified D route. Kincaid Forest contends that because the Modified D route uses existing right-of-way, owners of property adjoining the Trail would not be compensated for residual damages. Thus, while the Company will save money by using existing right-of-way, the cost will be transferred to uncompensated nearby property owners. Kincaid Forest maintains that the only way to rectify this injustice is to force the Company to acquire at least a part of the adjoining landowners' property so that the landowners may recover some compensation for property damages. Kincaid supports adoption of the E7 route where there would be no uncompensated damage to landowners' property.⁴⁴

Company Rebuttal

On rebuttal, Company witness Bailey responded to the testimony of SLLD witness Ruffner concerning the status of numerous planned subdivisions along the E7 route. Mr. Bailey stated that after reviewing Mr. Ruffner's testimony, he contacted officials with Loudoun County and the Town of Hamilton to determine the stage of approval or development of the parcels in question. Mr. Bailey provided the following information:

- 1. The Hedgerows is a cluster of parcels in the vicinity of segments 22 and 23, which include parcels owned by Cattail LLC and one member of the Harris family. They submitted a preliminary subdivision for 69 lots, which was rejected by the County because the jurisdiction for this parcel lies within the Town of Hamilton. The Town informed Mr. Bailey that the Hedgerows is currently an open application with the Town and is currently in the review and comment stage.
- 2. Canby North is a parcel north of segment 25 owned by Canby Road LLC. There are no subdivision applications pending on this parcel.
- 3. Canby is a parcel south of segment 25 owned by Canby Road Partners LLC. A preliminary subdivision was approved for 14 lots. No construction plans or record plats have been filed with the County.
- 4. Laycock is a parcel on the west end of segment 49 that is owned by Reva Properties LLC. A pre-submission meeting for preliminary subdivision was filed for 153 acres. No preliminary subdivision was filed.
- 5. Lake Hill is a parcel on segment 50 that has a final plat under the third review for 47 lots.

⁴⁴Kincaid Forest Brief at 1, 2.

- 6. Mountain Gap Farm is a parcel at the southern end of segment 52. A preliminary subdivision application was approved in 2006 for 68 lots. No construction plans or final plats have been filed.
- 7. Hamlets at Wulfcrest is a parcel on segment 54 that is immediately south of Rokeby Hamlets. A preliminary subdivision was approved in 2006 for 25 lots. Construction plans are under review.
- 8. Heritage Hamlet is a parcel on segment 54 just east of the Wulfcrest parcel. The preliminary subdivision for 9 lots was approved in 2006 and construction plans are under review.
- 9. Kingdom Farm is a parcel on the east end of segment 54. The record plat for 12 lots in an inactive application. The preliminary subdivision was approved for 59 lots. Construction plans and profile drawings are under review.
- 10. Creekside consists of a number of parcels on segment 37. There is a Rezoning Application for mixed use and residential under review for these parcels. There are no active subdivision applications.⁴⁵

Mr. Bailey testified that according to local officials, preliminary subdivision plats have a requirement that a record plat must be filed within two years of approval or the preliminary subdivision plat becomes void. Once the record plat is filed, other requirements must be met in the approval process.⁴⁶

Responding to the prefiled testimony of Elizabeth Merritt on behalf of Oatlands, Mr. Bailey said that he and Ms. Merrit do not disagree that the impact to archaeological resources is greater with underground construction.⁴⁷

On rebuttal, Company witness Cox provided revised cost estimates for each of the overhead and underground variations of the E7, D3, and Modified D routes. Mr. Cox explained that previously, he had provided cost assessments based, in part, on the combined assessed value of the land and improvements for each parcel crossed by the routes. To be more consistent with the Company's original methodology, the estimates provided below are based on the assessed value of the land exclusive of any improvements. Mr. Cox further explained that the Company then revised the updated cost estimates provided in his testimony on remand to reflect the revised right-of-way acquisition cost estimates. The revised updated cost estimates, along with the original updated estimates for comparison, are as follows:⁴⁸

 $\overline{^{48}Ex}$. No. 190, at revised pages 2, 3.

⁴⁵Ex. No. 189, at 2.

⁴⁶Id. at 2, 3.

⁴⁷Id. at 4.

Route	Original Updated Estimates	Revised Updated Estimates
E7 Overhead	\$37,904,658	\$36,659,618
E7 Hybrid #1 ¹ XLPE	\$74,904,710	\$73,761,617
E7 Hybrid #2 ² XLPE	\$97,214,170	\$96,234,786
E7 Hybrid #1 HPFF	\$82,450,510	\$81,307,417
E7 Hybrid #2 HPFF	\$112,944,170	\$111,964,786
D3 Overhead	\$38,702,383	\$36,620,698
D3 Hybrid #1 XLPE	\$76,200,451	\$74,220,714
D3 Hybrid #2 XLPE	\$98,647,117	\$96,831,089
D3 Hybrid #1 HPFF	\$83,746,251	\$81,766,514
D3 Hybrid #2 HPFF	\$114,377,117	\$112,561,089
Modified D Overhead	\$42,942,527	\$37,802,068
Modified D Hybrid XLPE	\$63,396,905	\$59,343,834
Modified D Hybrid HPFF	\$68,736,905	\$64,683,834

¹Hybrid #1 would utilize underground construction along Route Segments 49, 25, 23

In response to Staff's testimony pertaining to structure shifts and structure eliminations along Trail B' in the Shenstone area, Mr. Cox stated that Staff's proposals have been reviewed and determined to be feasible. Mr. Cox did warn, however, that the longer span lengths would require additional tree trimming due to additional conductor sag. Staff's recommendation to place all structures on the Trail property along the eastern edge or along the western edge of the property is also feasible in Mr. Cox's opinion. Mr. Cox noted, however, that as with any transmission project, the Company would need to retain the flexibility to finalize structure locations based on field conditions present at the time of construction.⁴⁹

The Company has concluded that all routes could be constructed within an 18- to 24-month time frame. Mr. Cox explained that contrary to Park Authority testimony that the Modified D route would take longer to construct, there are always obstacles and difficulties unique to each transmission line route. Mr. Cox testified that the estimated construction time of 18 to 24 months for the E7, D3, or Modified D routes reflects the Company's extensive experience in the construction of transmission lines under many types of local conditions, and includes the time needed to overcome any obstacles.⁵⁰

Mr. Cox stated that he made a site visit with a transmission line construction coordinator to the portion of the Modified D route that is located on the Trail and confirmed that the detailed engineering provided by the Company is accurate, and the transmission line can be constructed using the Modified D route as described in the detailed engineering report.⁵¹

²Hybrid #2 would utilize underground construction along Route Segments 49, 25, 23, 22, 6, 4 and 1.

⁴⁹Id. at 3.

⁵¹Id. at 5.

Mr. Cox explained that final engineering of a route is not performed until the route is approved by the Commission. Once a route is approved, the Company and the contractor strive to minimize impacts during the construction process and to restore any areas impacted during construction, including, for example, restoring or replacing the pavement and landscaping along the Trail. Mr. Cox acknowledged that portions of the paved trail or horse trail may need to be closed for safety reasons for periods of time during the construction process, but that such closures would be minimized as much as possible. Mr. Cox added that the Company has experience dealing with such issues during the construction process as with the construction of the Beaumeade-Greenway transmission line project along the Trail.

Mr. Cox further explained that attaching the existing distribution line to the transmission line structures would be done in a way that would not require any additional tree trimming in the Park. This would be accomplished by attaching the distribution line on arms opposite the Trail property. Mr. Cox stated that installing 145-foot poles to minimize impacts to the Trail's existing tree canopy requires shorter span lengths to reduce wire sag. Mr. Cox explained that once construction is complete, areas along the Trail that required any clearing for temporary construction access would be landscaped with new trees.⁵²

Company witness Hoover presented rebuttal testimony in response to the testimony of Park Authority witness Zimar regarding estimated tree clearing and tree trimming along those sections of the Modified D route on or adjacent to the Trail. Mr. Hoover first addressed the contention that if the Modified D route is approved, clearing along the Trail would be extensive, particularly at pole locations. Mr. Hoover agreed that a structure site would have to be totally cleared for the construction of a tower. However, once the construction is complete, DVP would plant vegetation compatible with the operation and maintenance of the line. Mr. Hoover explained that the increased conductor height from the 145-foot poles would allow the planting of a wide variety of desirable species. For example, east of the Pleasant View Substation where standard height poles were used, only tree species with a mature height of fifteen to twenty feet are allowed. With the 145-foot poles, trees with a mature height of forty to fifty feet, depending on terrain, could be planted or preserved.⁵³

In response to criticism that he did not perform a detailed tree analysis by species count, Mr. Hoover stated that until the final pole placements are determined, a detailed tree count would have no value because there are so many variables that cannot be defined at this stage of the process. Mr. Hoover stated that, in his opinion, there are no locations along the corridor that would require over fifty percent of the trees to be removed unless the tree species was ailanthus or another species that the Park Authority would prefer to have removed. Regardless, Mr. Hoover emphasized the Company would replant desirable species once the proposed structures are in place. At that time, the undesirable species would be removed as needed and replaced with species desirable to both the Park Authority and the Company.⁵⁴

⁵³Ex. No. 194, at 3, 7.

⁵²Id. at 8.

⁵⁴<u>Id.</u> at 4, 5.

In conclusion, Mr. Hoover explained that along the eastern sections of the Trail, the Company complied with Park Authority requests to create "woodpecker trees." Woodpecker trees are cut below conductor height, girded and left to die and decay thereby creating habitat for woodpeckers. Mr. Hoover stated the Company will adjust its forestry plans and practices to accommodate the property owner wherever and whenever possible. Finally, Mr. Hoover disputed the assertion that danger tree cutting would be extensive. Mr. Hoover states that, with the 145-foot towers, danger tree cutting would be minimal. ⁵⁵

DISCUSSION

I find that the Modified D route with overhead construction best serves the public interest. It will provide a solution that creates a line of minimal length with maximum use of existing right-of-way, and I therefore recommend it be adopted by the Commission. Only two segments are not within or immediately adjacent to existing right-of-way, segment 46' and segment 11'. Combined, these two segments total less than one mile.⁵⁶ The total length of the Modified D route is approximately 11.9 miles, almost 4 miles shorter than the E7 route proposed by the Company.⁵⁷

The Park Authority presents many arguments supporting its position that the proposed transmission line should not be located on Park Authority property; however, it does not refute the fact that it signed a deed⁵⁸ agreeing to the location of future electric lines on the property. The Park Authority paid a reduced purchase price based on that agreement.

Perfectly useable existing right-of-way providing the most direct route is available in this case. FERC's first guideline states that existing right-of-way should be given priority when adding additional facilities. The power of eminent domain is a powerful tool and should be used only with great discretion. It is difficult to justify the taking of private land when there is a perfectly good alternative available which maximizes the use of existing right-of-way.

I further recommend against underground construction of the proposed line for two reasons: the terrain along the Modified D route is not conducive to an underground line, and the locality has not offered to bear any of the incremental cost, as permitted by Virginia law. As addressed previously, placing this transmission line wholly or partially underground comes at a very high cost when compared to overhead construction. For the Commission to require the Company to construct this transmission line underground without any cost sharing by the locality would establish a dangerous and costly precedent for ratepayers.

No one in the remand proceeding offered evidence supporting underground construction, or disputed the testimony proffered by the Company and Staff witness Martin regarding underground construction. There are significant differences in the impacts of underground construction and overhead construction. Undergrounding requires trenching and removal of all root masses and stumps; the land is disturbed for the entire length of the underground route. Vegetation is very

⁵⁵<u>Id.</u> at 6, 7.

⁵⁶Tr. 2565, 2566.

⁵⁷Ex. No. 53.

⁵⁸Ex. No. 14.

limited on the right-of-way after construction is completed. In contrast, overhead line construction requires far less vegetation removal, especially where taller towers are used, and only construction of the tower foundations requires soil disturbance.

Underground construction within the Trail property would have a substantial impact. Trees would have to be removed along the entire route and historic assets within the Trail property would be at far greater risk from underground construction. Furthermore, access roads for underground projects are more substantial because heavier construction equipment is required.

Using Exhibits JAC 1-4, Commission Staff has made detailed suggestions regarding pole placement and elimination of certain poles for the Modified D route in the Shenstone area. The actual number of poles and their placement cannot be determined until a route is selected and a final engineering analysis is performed. While the elimination of unnecessary poles is always desirable, there are trade-offs to be considered. For instance, longer span lengths result in greater conductor sag which would require additional trimming or removal of trees. Further, if the right-of-way is located entirely on Park Authority property, the Shenstone homeowners would not be compensated for impact on their properties.

I find that certain principles should be followed in determining pole locations along the Trail. The primary consideration must be a sound engineering design and the Company must be afforded the flexibility it needs to construct the line using accepted engineering principles. Placing the poles and conductors as far away from residences as possible must also be a top priority. The poles should be located on existing right-of-way wherever possible. This would include VDOT right-of-way, the Trail property right-of-way, and the distribution line right-of-way. However, the poles should not be placed directly adjacent to the paved pathway of the Trail or the equine trail unless absolutely necessary. The line should be engineered to require minimal tree removal and trimming. The Company should seek a balance of these factors in determining a final engineering design.

Park Authority witness Katherine H. Rudacille was critical of the Company's past efforts in restoring vegetation. Ms. Rudacille presented photos of trees planted by the Company on other portions of the Trail in the vicinity of the Pleasant View Substation that died from lack of water. ⁵⁹ Company witness Hoover confirmed that although the Company does replace some trees that die, the Company does not provide any after care to the trees and vegetation it plants as restoration. Primarily, tree loss has been a result of a lack of watering, according to Mr. Hoover. Mr. Hoover estimated that out of 1,500 trees planted on sections of the Trail east of Leesburg, approximately 80 trees died but were replaced by the Company. ⁶⁰

When comparing vegetation management east of Leesburg with Trail segment B' of the Modified D route, it should be remembered that the terrain near the Pleasant View Substation is relatively flat and open, whereas the Trail B segment is rolling and hilly. In many places through Trail Segment B, the paved portion of the Trail is located at the bottom of deep cuts and ravines. Company witness Hoover testified that some of these cuts and ravines are twenty feet deep and up

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⁵⁹Tr. 6121-6123; Ex. No. 179.

⁶⁰Tr. 6434-6436.

to forty feet long. According to Mr. Hoover, the proposed line could be installed on high ground in these areas with no impact to the canopy over the Trail. ⁶¹

If the Commission approves the Modified D route, I recommend that the Company be responsible for replacing any vegetation it plants that dies within a period of one year from the time it is planted. I would leave it to the Company's discretion as to whether it would be cost-effective to provide post-planting care such as watering. The vast majority of the vegetative restoration would be located at or near tower locations.

The Town of Leesburg erroneously stated in its brief that the Company settled on its currently proposed E7 route after years of study. ⁶² In fact, the Company assumed all along in its planning that it would use its existing right-of-way along the Trail for this transmission line. It was only weeks before the application was filed that the E7 route was developed. ⁶³ Leesburg argues in its brief that establishing right-of-way for an anticipated Middleburg to Hamilton line would benefit the Company in the future. ⁶⁴ This argument ignores the fact that the Company now has existing right-of-way for the Pleasant View – Hamilton line. Leesburg advocates the virtual abandonment of that existing right-of-way that has been purchased by the Company's ratepayers, to establish new right-of-way through the exercise of eminent domain.

In response to the seven points set forth by the Commission in its Remand Order of February 21, 2007, I find as follows:

- 1. The construction time required for the E7, D3, and Modified D routes, whether overhead or underground, is 18 to 24 months;
- 2. Right-of-way acquisition costs for the E7, D3, and Modified D routes have been discussed above. Although there is Company testimony to show that the comparable costs are roughly equivalent for the three routes, several factors must be remembered. First, the Modified D route utilizes by far the most existing right-of-way and is almost four miles shorter than the E7 route, thereby reducing acquisition costs. There are numerous subdivisions in various stages of development along and/or adjacent to the E7 route. As these subdivisions progress through the various stages of approval, the value of the properties increases, thereby putting upward pressure on the acquisition costs of the E7 route.
- 3. As discussed above, the Company has submitted detailed engineering data with multiple options for the portion of the Modified D route comprising segments within or adjacent to the Trail, including pole placements and existing and/or new right-of-way. According to the engineering data, there are several options for pole placement and alignment that would minimally impact the Trail and not encroach on the property of Shenstone homeowners. Final pole placements will not be determined until a route is selected. I have set forth guidelines on page 18 of this Report for pole placement.

⁶¹Tr. 6430.

⁶²Leesburg Brief at 2.

⁶³Report of Howard P. Anderson, Jr., Hearing Examiner at 69 (January 4, 2007).

⁶⁴<u>Id.</u> at 5.

4. At some time in the future it is probable that a transmission line will be required to connect the Middleburg and Hamilton Substations. However, there has been no study of prospective routes and their terrain. The terrain traversed by segments of the E7 route west of U.S. Route 15 is primarily open farmland that would be highly suitable for underground construction. Diggs Valley consists of open farmland with few structures that are less than one to two hundred years old. Expansion of the Goose Creek Historic District to include Diggs Valley, with its broad, open fields and sweeping vistas, would be a natural expectation. Considering the terrain across the Goose Creek Historic District and Diggs Valley and the technological advances being made with underground transmission facilities, it is entirely possible that a future Middleburg to Hamilton transmission line would be constructed underground. Certainly, the historic and relatively unmarred terrain of the E7 route and the Diggs Valley portion of the D3 and E7 routes should not be used for an overhead transmission route in this case simply to establish a right-of-way for a potential future line. Burns & McDonald did not study any future routes for a Middleburg to Hamilton line and it would be speculative to consider the location or type of construction of this potential future line.

The Company has requested an additional twenty feet of right-of-way for the portion of the E7 route west of Route 15 to accommodate the future line. However, the record clearly shows there is no current need for the additional twenty feet of right-of-way as required by § 56-46.1 of the Code of Virginia. In fact, Company witness LaVigne consistently stated that the Company has made "no decision about such a line or its routing." I find that the Company has failed to prove a present or current need for the additional twenty feet of right-of-way requested. Accordingly, I cannot recommend that the Commission grant the power of eminent domain for the condemnation of any additional right-of-way for a future transmission line for which no present need has been shown.66

- 5. If the Commission were to direct underground construction of part or all of the proposed transmission line, the following factors should be considered in determining whether the underground line should be constructed with XLPE cable or HPFF cable. Both cable types are significantly more expensive than overhead construction. However, although the XLPE cable is more advanced and less expensive than the HPFF cable, the Company has very limited experience with the operation and maintenance of XLPE cable. Therefore, the price advantage of the XLPE cable is offset by DVP's relative inexperience with this cable. Accordingly, the advantages and disadvantages of the two types of underground cable are relatively even.
- 6. Underground construction of the E7 and D3 routes along or adjacent to segments 49, 25, 23, and 22 would result in a hybrid line that has been characterized as the worst of both worlds. Depending on whether the underground portion of the routes would continue to the Hamilton Substation, one or two transition stations roughly equivalent in size to a substation with seventyfive-foot tall structures would be required. The transition stations would be located in relatively pristine countryside adjacent to a scenic byways.⁶⁷

⁶⁵Ex. No. 170, at 2, line 2.

⁶⁶Roanoke City v. Berkowitz, 80 Va. 616, 622 (1985); City of Richmond v. Carnea/,129 Va. 388 (1921).

⁶⁷Discussion of right-of-way, cost, reliability, impact on scenic assets, historic districts, and environment is found elsewhere in this Report.

7. Underground construction along the Trail would be highly destructive to the tree canopy and difficult because of the hilly terrain and historic structures. The historical components of the Trail are stone arches and boxes that could be directly impacted by underground construction. Overhead construction along this segment would have far less impact on the Trail. However, underground construction along this segment would benefit the Shenstone homeowners because it would remove the line from their viewshed.

FINDINGS AND RECOMMENDATIONS

In addition to the findings contained in my report of January 4, 2007, **I FURTHER FIND** that:

- 1. The Modified D route with overhead construction reasonably minimizes adverse impacts to the scenic assets, historic districts, and environment of the area concerned, and therefore, should be adopted;
- 2. For a period of one year subsequent to planting restorative vegetation and trees, the Company should be directed to replace all trees and vegetation that do not survive; and
- 3. The Company has failed to show a present need for an additional twenty feet of right-of-way along the segments of the E7 and D3 routes west of U.S. Route 15.

Accordingly, **I RECOMMEND** that the Commission enter an order that:

- 1. **ADOPTS** the findings set forth above in addition to the findings contained in my Report of January 4, 2007;
- 2. *GRANTS* the Company's application to construct the proposed overhead transmission line and substation;
- 3. *AMENDS* the Company's current certificates of public convenience and necessity to authorize construction of the proposed transmission and substation facilities; and
 - 4. **DISMISSES** this case from the Commission's docket of active cases.

COMMENTS

The parties are advised that any comments (Section 12.1-31 of the Code of Virginia and 5 V AC 5-20-120 C) to this Report must be filed with the Clerk of the Commission in writing, in an original and fifteen (15) copies, within twenty-one (21) days from the date hereof. The mailing address to which any such filing must be sent is Document Control Center, P.O. Box 2118, Richmond, Virginia 23218. Any party filing such comments shall attach a certificate to the foot of

such document certifying that copies have been mailed or delivered to all counsel of record and any such party not represented by counsel.

	Howard P. Anderson, Jr.	Respectfu	lly submitte	ed,	
	Howard P. Anderson, Jr.				
	Howard P. Anderson, Jr.				
	Howard P. Anderson, Jr.				

A copy hereof shall be sent by the Clerk of the Commission to all persons on the official Service List in this matter. The Service List is available from the Clerk of the State Corporation Commission, c/o Document Control Center, 1300 East Main Street, First Floor, Tyler Building, Richmond, VA 23219.